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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,844	07/03/2001	Edward T. Hessell	K-4	1464

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EXAMINER	
MCAVOY, ELLEN M	
ART UNIT	PAPER NUMBER
1797	

NOTIFICATION DATE	DELIVERY MODE
01/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/898,844	HESSELL ET AL.	
	Examiner	Art Unit	
	Ellen M. McAvoy	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,5,16,18,20,22,24,26 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,5,16,18,20,22,24,26 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *16 October 2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 5, 16, 18, 20, 22, 24, 26 and 27 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Waddoups et al (6,333,298) in combination with either Dressler et al (4,604,491) or Ho et al (5,254,274), and in further view of Le et al (5,602,086).

Applicants' arguments filed 16 October 2007 have been fully considered but they are not persuasive. As previously set forth, Waddoups et al ["Waddoups"] disclose a molybdenum-free lubricating oil composition exhibiting improved fuel economy and fuel economy retention properties which comprises (a) a base stock oil compound of at least 50 wt.% mineral oil, the base stock oil having a viscosity of 4.0-5.5 mm^2/s at 100°C, 95 wt.% or more saturates, 25 wt.% or less naphthenics, a NOACK volatility of 15.9% or less, a kV of 4.0-5.5 mm^2/s at 100°C, and a viscosity index of at least 120; (b) at least one calcium detergent and (c) at least one organic friction modifier. See column 1, lines 30-45. Waddoups teaches that the base stock oil should contain 50%-100% by weight of a hydrocarbon mineral oil, and that blends of hydrocarbon mineral oil and synthetic oils are suitable so long as the base stock oil used to prepare the lubricating oil compositions has the properties set forth above. Waddoups teaches that the preferred base stock oils are (a) Group III base stocks or (b) blends of Group III base stock oils with Group I, Group II or Group IV base stocks. Examples of other base stock oils of lubricating viscosity which may be blended with the hydrocarbon mineral oils to form the base stock oil

useful in the invention include alkylated polyphenyl synthetic oils. See column 1, line 50 to column 2, line 42. Applicants' invention differs from Waddoups by specifying that the synthetic oil blended with the Group III base oil is an alkylated naphthalene which is alkylated by at least two C_6 to C_{30} alkyl chains. However, such synthetic base oils are known in the art as evidenced by Dressler et al ["Dressler"] and by Ho et al ["Ho"].

Dressler discloses synthetic base oils for functional fluids and greases comprising a mixture of monoalkylated naphthalenes and polyalkylated naphthalenes represented by the formula in column 1, lines 20-28, wherein the R groups are independently selected from H, methyl, and a 12-26 carbon atom alkyl. Dressler teaches that the synthetic naphthalene oils may be used for preparing lubricants, hydraulic fluids and other functional fluids. See column 2, lines 15-22. The examiner maintains the position that the alkylated naphthalenes of Dressler meet the limitations of the alkylated naphthalene component of the claims. Ho teaches aromatic compounds alkylated with C_{20} to C_{1300} olefinic oligomers to produce synthetic lubricant base stocks and additives for lubricants. Ho teaches that the alkylated aromatic products have the structure set forth in column 3, lines 35-58, wherein polyalkylated naphthalenes are found in the second formula. The examiner maintains the position that the polyalkylated naphthalenes of Ho meet the limitations of the alkylated naphthalene component of the claims. Having the prior art references before the inventors at the time the invention was made it would have been obvious to have blended the polyalkylated naphthalene synthetic oils of either Dressler or Ho with the lubricating oil composition of Waddoups. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation relied on by the examiner is the disclosure in Waddoups allowing for the addition of synthetic base oils to the composition such as alkylated polyphenyls. Naphthalenes are an example of polyphenyls. Further, Le et al ["Le"] is added to show that alkylated aromatic base fluids, such as alkylated naphthalenes, are known to be blending stocks with other lubricating base oils such as polyalphaolefin base fluids.

Applicants argue that there is no motivation to make the suggested modification. While applicants do not take issue with whether alkylated naphthalenes, such as those taught by Dressler or Ho, were known at the time of applicants' invention, applicants question as to why one or ordinary skill in the art having Waddoups' general teaching of using other base stock oils which includes numerous broad generic classes of compounds, would be directed to using applicants' claimed alkylated naphthalenes absent applicants' suggestion to do so. This is not deemd to be persuasive because, as previously set forth, Waddoups allows for the addition of alkylated polyphenyls as synthetic blending oils. Generally, there is nothing unobvious in choosing "some" among "many" indiscriminately; however, claims may be allowed when the choice is based on applicants' discovery that there is a special significance and where there is nothing in the art to suggest such a criticality. *In re Lemin,* 141 USPQ 814. The examiner is of the position that there is no evidence of record that the alkylated polyphenyls have a special significance as blending oils over the other synthetic oils listed as suitable in Waddoups.

Applicants argue that Waddoups requires the presence of a calcium detergent, and independent claim 3 and claims dependent thereon are directed to a composition "consisting

essentially of" Group III base oils and an alkylated naphthalene. Thus, applicants argue, the use of the transitional phrase "consisting essentially of" excludes the required calcium detergent of the Waddoups patent. This is not deemed to be persuasive because the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The examiner is of the position that the addition of a calcium detergent to the lubricating oil compositions of the claims would not alter the basic and novel characteristics of the invention as a lubricant composition which "exhibits additive solvency and superior thermal and hydrolytic stability compared to base oils either alone or blended with esters, while maintaining seal swell characteristics similar to blends of base oils and esters." Specification page 3, third paragraph. Further, as set forth in MPEP 2111.03, for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355.

Applicants point to the Declaration under 37 C.F.R. 1.132 of Dr. Edward T. Hessell which demonstrates that the addition of Waddoups required calcium detergent adversely affects the water separation properties of a base III oil and alkylated naphthalene composition. The Declaration has been carefully considered; however, the examiner is of the position that it fails to rebut the established *prima facie* case of obviousness for several reasons. First, the claims at issue are directed towards a composition, and not to the method of using the composition in an environment wherein the water separation property is essential. Further, the results presented

pertain to one calcium detergent, an overbased calcium sulfonate, and the calcium detergent of Waddoups may be neutral or overbased, and may comprise calcium phenates, salicylates, sulfonates or mixtures thereof. See column 2, lines 45-62. It is not clear that the other calcium detergents taught as suitable in Waddoups also have the same results in the property of water separation in a composition containing a Group III mineral base oil and an alkylated naphthalene.

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ellen M McAvoy
Primary Examiner
Art Unit 1797

EMcAvoy
December 20, 2007